

# SCIENCE INQUIRY I - INTEGRATED SCIENCE 351 610 SYLLABUS Tuesday: 5:00-7:29 pm; Room 110 - TAMU-Commerce Midlothian Campus Instructor: Mrs. Evelyn Restivo; <u>erestivo2001@yahoo.com</u>; Spring 2016 Office hours: 4:30 – 5:00 pm Tuesday

## **COURSE INFORMATION**

**Optional Text:** Teaching Children Science A Discovery Approach, 6<sup>th</sup> Edition, 2004 Joseph Abruscato, Allyn & Bacon

Course Description: Inquiry: Knowledge and Skills of Science

Science topics and themes are chosen to emphasize broad concepts highlighted in the Texas and National Science Standards. Topics will include conservation laws, systems in nature, the nature of scientific inquiry, and presentation of scientific information. The course will be taught using an inquiry/discovery based format, modeling instructional techniques proven effective by current educational research.

### **COURSE REQUIREMENTS**

**Course Goals**: To provide a preliminary overview of science content and laboratory skills that will help prepare pre-service elementary teachers to teach science concepts as inquiry. Topics are correlated with Texas Essential Knowledge and Skills objectives, and with elementary science teacher competencies that will provide preparation to pass the science section on the exit exam.

**Course Requirements:** To be successful in IS 351 you must attend all classes, pay attention, participate in discussions, follow verbal and written instructions, complete lab activities and lab reports properly, research assigned topics, and prepare for testing. You need to become familiar with the TEKS, in abbreviated form for class, and in detail at the TEA web site: <a href="http://www.tea.state.tx.us">www.tea.state.tx.us</a>. You will also need to become familiar with Safety Regulations from Flinn Scientific at <a href="http://www.flinnsci.com">www.flinnsci.com</a>. Labs will require lined paper, unlined paper, graph paper and colored pencils. Most other materials and supplies will be provided.

<b>Grading Scale</b> : (100-90% = A; 89-80% = B; 79-70% = C; 6	etc.)
Lab/Reports Average (drop lowest grade)	50%
Mid Term and Final Exam Average	40%
Attendance/Participation	10%

#### COURSE AND UNIVERSITY PROCEDURES/POLICIES

#### **Course Specific Procedures:**

Attendance will be taken by means of a sign in sheet each class meeting. Missing three labs could be grounds for removal from class. The first portion of each class will review the previous concept and present an overview of the scheduled topic. The second portion of each class will be the lab activity for that topic. Prime time for a break, if you need one, will be immediately after lab directions before you begin the lab.

Lab reports will be done individually and/or as a group and will be due at the end of each class unless otherwise stated. Labs will not be made up, the lowest lab grade will be dropped, and all other missed labs will be zeros. Prior notification and medical documentation may provide an excused second absence at the discretion of the instructor. At home lab reports are due on the date listed, if you are absent your lab report is still due on that date. Exams may be rescheduled if the instructor is notified prior to the date, the absence can be documented as a medical emergency, and a convenient time to take the exam can be determined by the instructor.

No **food or drinks** are allowed in the lab room. As you enter the lab room please remember to mute or turn off all cell phones/pagers or any electronic device that could disrupt the class. No cell phones or any other electronic devices are to be used for any purpose during class without prior approval of the instructor. Any cell phone or electronic device that disrupts exams will be cause for stopping the exam for the class. For a complete listing of TAMU-Commerce Procedures go to <u>www.tamu-commerce.edu/administration/</u>

### **University Specific Procedures:**

#### ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. A&M-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services Texas A&M University-Commerce Gee Library 132 Phone (903) 886-5150 or (903) 886-5835 Fax (903) 468-8148 <u>StudentDisabilityServices@tamu-commerce.edu</u> Student Disability Resources & Services

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook*).

### IS 351 COURSE OUTLINE / CALENDAR Spring 2016

Lecture/Lab Topics:

What's In Your Name; Welcome; Syllabus; Schedule; TEKS; Laboratory Regulations and Safety; Introduction to Lab Equipment; Thinking Maps; Brain Study; PPREAC and 5 "E" Notes; Metric Measurement Chart; "The Science Model: Objects in a Bag Lab"

Primarily Bears on the Go Lab: Learning colors and number combinations plus Stack and Track Bears Lab: Learning organization, assortment, distribution, probability, and non-traditional graphing

Bears Survival Discussion; Measurement Lab: Length, Volume, Mass and Temperature

Measurement Discussion; Determining the Difference Between Living and Non-Living in Life Cycles Lab;

Position and Direction of Motion: Speed, Velocity, Acceleration, Free Fall and Air Resistance Lab

Living and Non-Living in Life Cycles Discussion; Position and Direction of Motion: Speed, Velocity, Acceleration, Free Fall and Air Resistance Lab; Whole, Parts, and Parts of Parts: "Diary of a Worm" Lab

Position and Direction of Motion: Speed, Velocity, Acceleration, Free Fall and Air Resistance Discussion; Whole, Parts, and Parts of Parts: "Diary of a Worm" Discussion; Science and Children Reading Report Assigned; **MID TERM EXAM** 

Late Winter/Spring Break: Work time for Science and Children Reading Report

Mid Term Exam Discussion; Science and Children Reading Report Due; What Has Eight Legs and Simple Eyes? "Diary of a Spider" Lab

Science and Children Reading Report Discussion; "Diary of a Spider" Discussion; What has Six Legs and Two Wings? "Diary of a Fly" Lab

"Diary of a Fly" Discussion; Dichotomous Keys, Taxonomy, Classification Traits and Forensic Chemistry Lab

Classification Traits and Forensic Chemistry Lab Discussion; "Mouse Paint" Lab: Color Mixing and Pigments

States of Matter Lab

"Mouse Paint" Lab Discussion; Fossil Records: Dinosaur Tracks Lab

Fossil Records: Dinosaur Tracks Discussion; FINAL EXAM

"This document contains information which may be changed at the discretion of the instructor."